

Supplementary Information:

Esterase in Imported Fire Ants, *Solenopsis invicta* and *S. richteri* (Hymenoptera: Formicidae):

Activity, Kinetics and Variation

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Table S1. Results of pairwise comparison (Mann–Whitney U test) on esterase activities between castes within ant species.

Species	Substrate	Pairwise comparison	<i>z</i>	<i>P</i>
<i>S. richteri</i>	α -NA	Female alate vs worker	5.18	<0.0001
		Male alate vs worker	-12.08	<0.0001
		Female alate vs male alate	-10.85	<0.0001
	β -NA	Female alate vs worker	9.55	<0.0001
		Male alate vs worker	-10.63	<0.0001
		Female alate vs male alate	3.11	0.0009
<i>S. invicta</i>	α -NA	Female alate vs worker	-6.53	<0.0001
		Male alate vs worker	8.07	<0.0001
		Female alate vs male alate	10.16	<0.0001
	β -NA	Female alate vs worker	7.64	<0.0001
		Male alate vs worker	-0.11	<0.0001
		Female alate vs male alate	6.89	0.0009

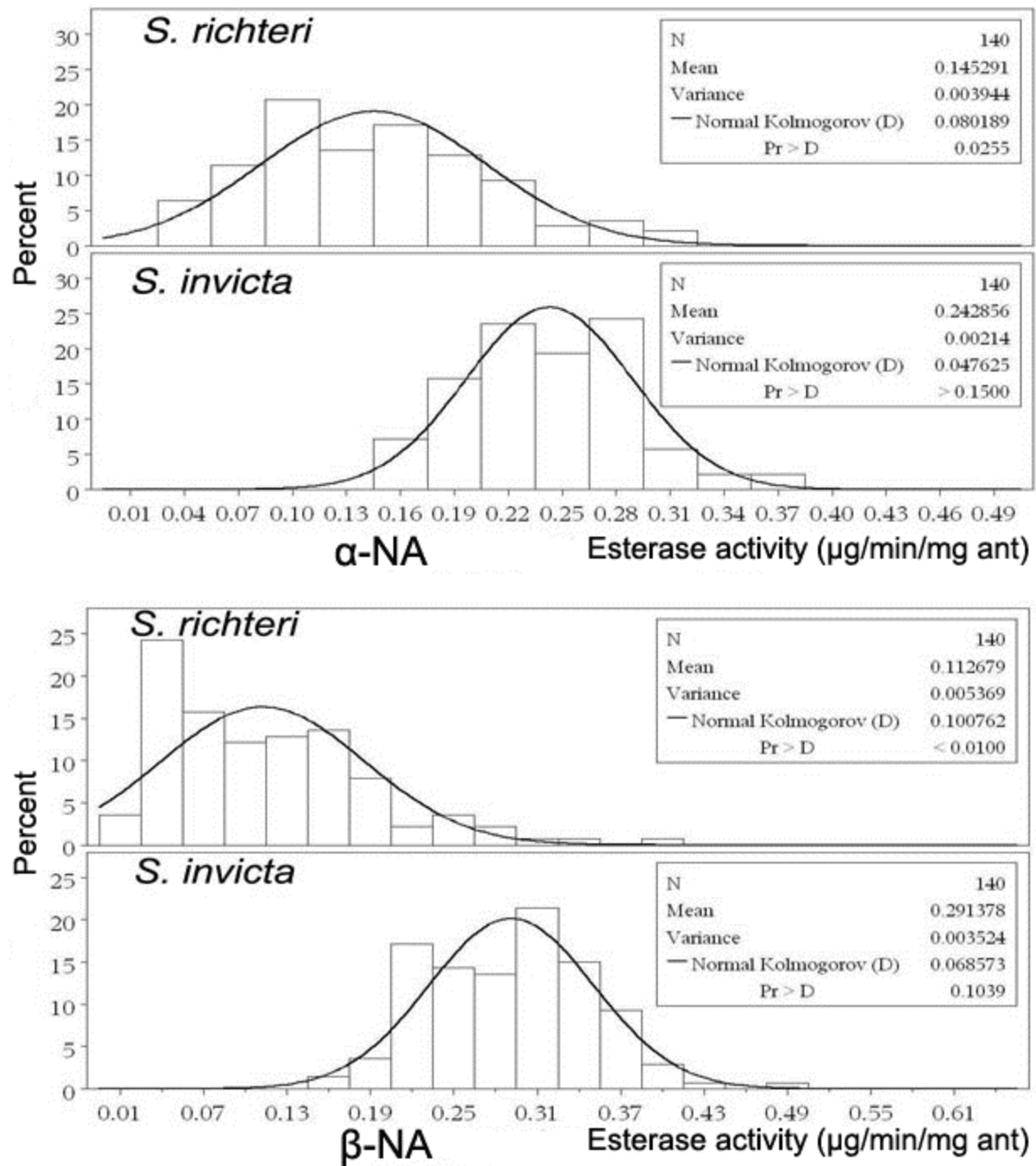


Figure S1. Histograms of esterase activity in individual workers of *Solenopsis invicta* and *S. richteri* based on two substrates, α -naphthyl acetate (α -NA) and β -naphthyl acetate (β -NA).

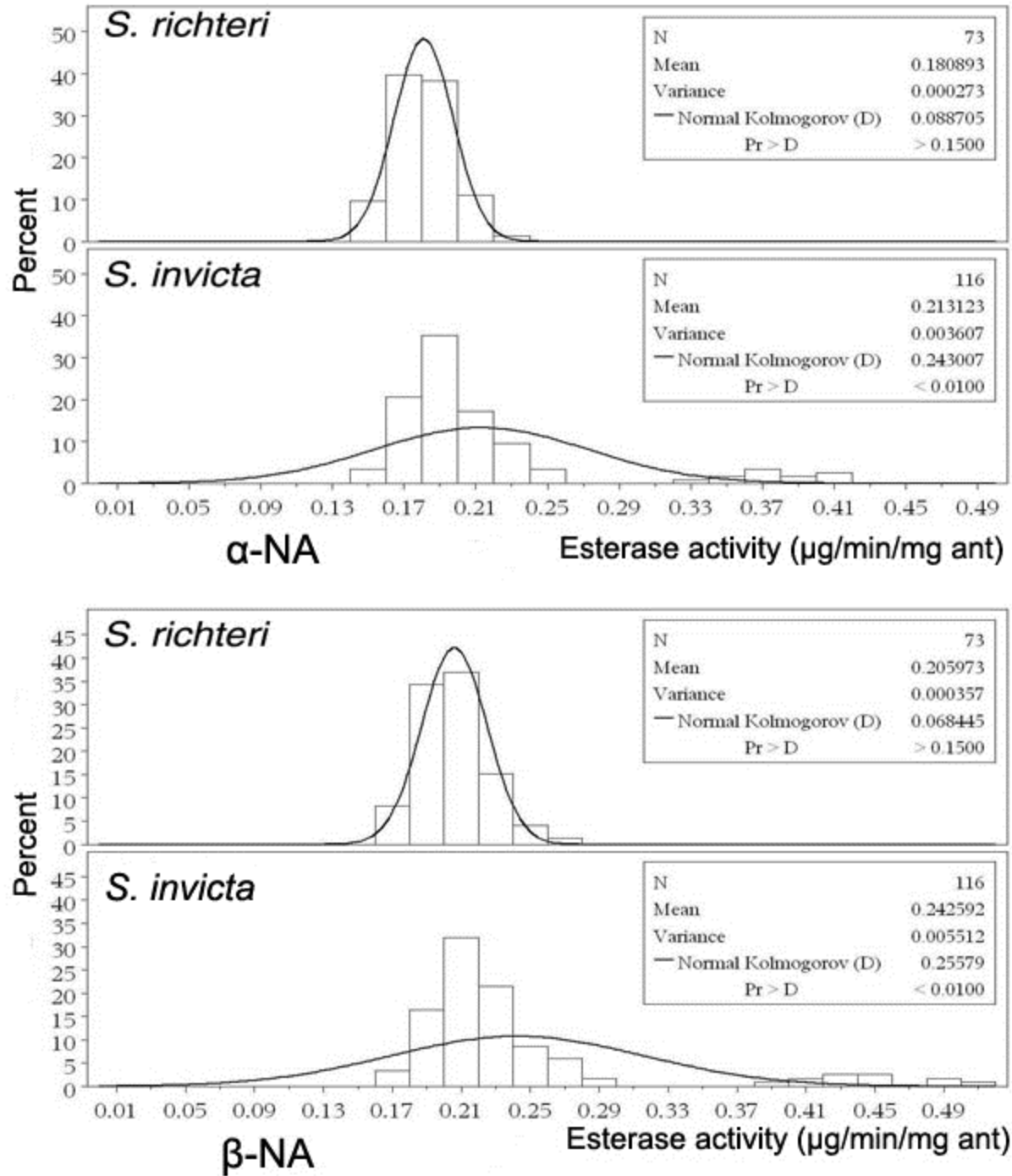


Figure S2. Histograms of esterase activity in individual female alates of *Solenopsis invicta* and *S. richteri* based on two substrates, α -naphthyl acetate (α -NA) and β -naphthyl acetate (β -NA).

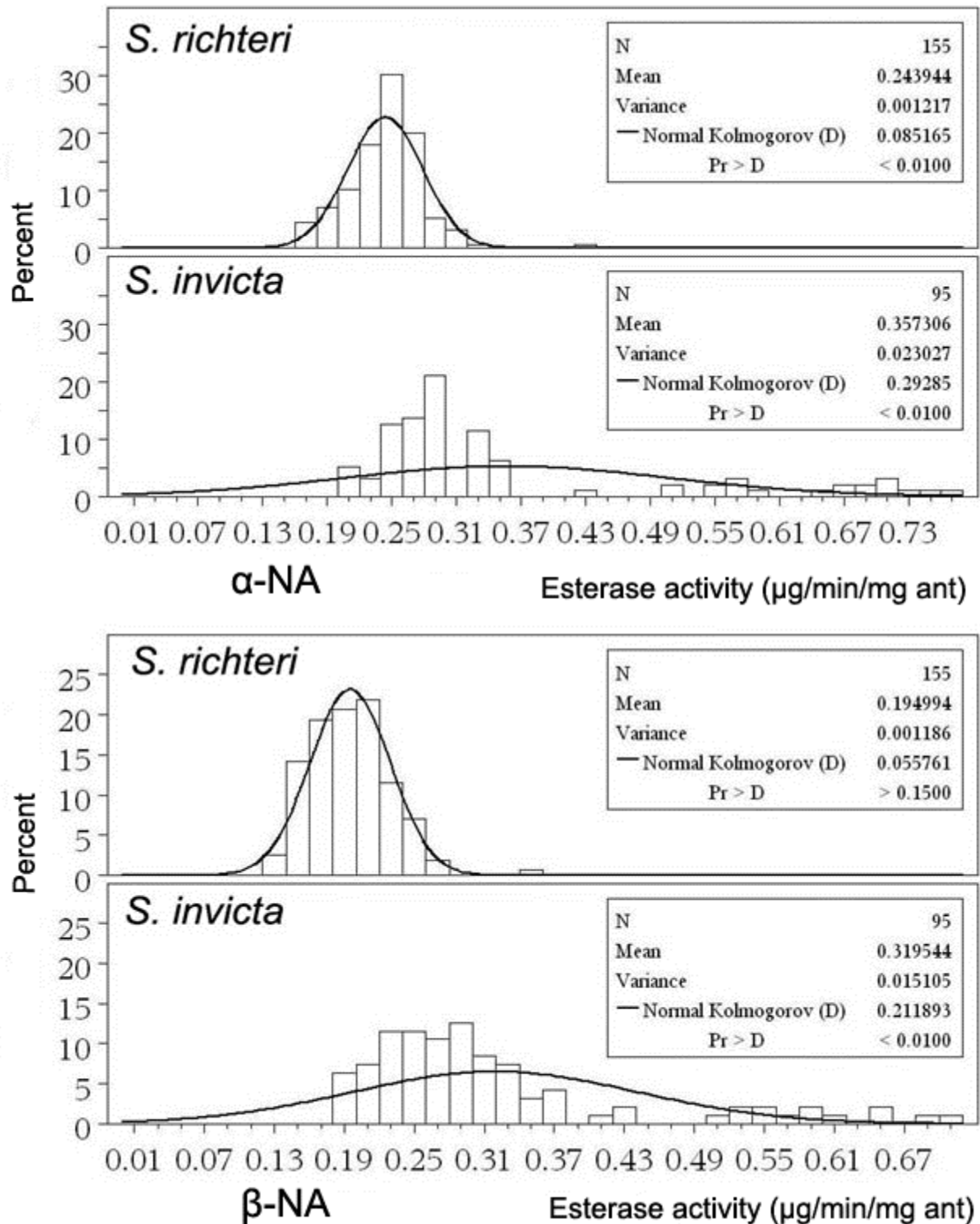


Figure S3. Histograms of esterase activity in individual male alates of *Solenopsis invicta* and *S. richteri* based on two substrates, α -naphthyl acetate (α -NA) and β -naphthyl acetate (β -NA).